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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,466	09/16/2003	Yuan Sung Weng	BA-22861 (WENG-6)	2193
178	7590	03/11/2005	EXAMINER	
BUCKNAM AND ARCHER 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			LAI, ANNE VIET NGA	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/663,466		WENG, YUAN SUNG	
	Examiner		Art Unit	
	Anne V. Lai		2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Natori et al** [US. 3,937,004] in view of **Kubo et al** [US. 5,376,924].

Regarding claim 1, **Natori et al** disclose a wrist time device (electronic timepiece, pager watch), for detecting deleterious gases/molecules (gas, radiation) and displaying time/data, comprising (see abstract; drawing):

a control circuit unit 50A, for processing data and time in accordance with a control signal and controlling operation of each members;

a display unit 5, for displaying data and time;

a memory unit 50;

an input unit (key switch 45), for input of the control signal to the control circuit unit to allow the control circuit unit to process the data and control the operation of each of members based on the control signal;

a timer unit (282, 1A);

a battery 60A;

a micro gases/molecules detection unit (unit 25A, sensors 25, 26, 27), for performing real-time detection of gases/molecules flew in from the surrounding;

an indicator (speaker 15, display 32) for indicating the type of gas being detected (three sensors being used; col. 2, lines 38-48).

Natori et al do not specify in detail the operation of the sensor in detecting and identifying the type of gas or molecule. **Kubo et al** teach a method for an absorption wavelength detecting type gas/molecule sensor identifying the type of gas/molecule being detected (hydrocarbon gas, CO, CO₂, O₂, pyroelectric element) by comparing the detected spectral pattern with the pre-stored spectral pattern of specific gases/molecules (col. 8, lines 41-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the absorption wavelength detecting type gas/molecule sensor of **Kubo et al** to the gas/radiation sensing wrist time device of **Natori et al** as designer choice of sensor based convenient of supply or cost.

Regarding claim 2, **Natori et al** disclose a watchband for easy to carry the device along (1A; drawing).

Regarding claim 4, **Natori et al** disclose audible alarm and flashing indicator (col. 2, lines 13-15), although beeping is not specify, it would have been obvious to one having ordinary skill in the art at the time of the invention was made the beeping can be implement as designer choice to attract user attention to the alarm situation.

Regarding claim 5, **Natori et al** disclose a timer to provide a time and an elapse time (electronic timepiece, col. 2, lines 1-6), although the statement is not exactly the same as the claimed invention 6, however it would have been obvious a function of the timer can be set based on designer choice for the convenient of use.

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Regarding claim 6, **Natori et al** disclose the display unit is a liquid crystal display device (col. 1, line 60).

Regarding claim 10, **Kubo et al** disclose the spectra of detected gases/molecules are generated by optical absorptive spectroscopy wherein the light can be infrared (col. 3, lines 46-55; col. 7, lines 1-4).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Natori et al** and **Kubo et al** in view of **Koyano et al** [US. 2003/0052792]

Regarding claim 3, **Natori et al** do not specify the displayed data includes the name and concentration of the detected gases/molecules; **Koyano et al** introduces a gas sensor wrist time device displaying the name and concentration of the detected gases/molecules (O₂, %; fig. 1). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to provide information display in detail for the user to know the severity of the gas contamination situation.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Natori et al** and **Kubo et al** in view of **Dungan** [US. 2001/0040509]

Regarding claim 7, **Natori et al** do not specify the integrated gas sensor wrist time device comprises a transmitting interface unit to connect to other devices for further data processing; **Dungan** teaches a very compact mobile gas sensor comprising a transmitting interface unit (RS232, analog output expansion) to connect to other detection or computer systems ([0080], [0071]-[0074]). It would have been obvious to

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one having ordinary skill in the art at the time of the invention was made to implement the transmitting interface unit of **Dungan to Natori et al** device to transmit data for further processing at a bigger system, keeping the wrist time device alleviated from complicated circuitry components therefore providing lighter weight and facilitating the mobility.

Regarding claim 8, **Natori et al** disclose the integrated gas sensor wrist time device comprises a transmitter, a receiver and an antenna, the device can receive signal from remote station but can only transmit signal to the receiver. **Dungan** teaches a very compact mobile gas sensor comprising a transceiver for wireless bi-directional data transmission ([0071]-[0074], [0060]). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the transceiver of **Dungan to Natori et al** device to transmit the sensed data to a remote station for facilitating the control distribution of data or alarm signal.

Regarding claim 9, **Natori et al** and **Dungan** device detecting gases similar to the gases cited by applicant in claim 9 (**Dungan** [0073]).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hongu et al disclose a portable timer alarm with ear attachment. [US. 6,008,720] (col. 13, lines 5-12).

Brooks discloses a heat detection system and method. [US. 6,181,250]

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 8:00 am to 5:30 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. V. Lai *ML*
March 4, 2005


JEFFERY HOFSSASS
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